IN THE CLAIMS:

Please amend claim 18 as follows.

1. (Previously Presented) A method comprising:

generating a residual signal from a multicarrier signal, the residual signal representing a difference between the multicarrier signal and a hard-clipped multicarrier signal;

applying a least squares function to the residual signal for at least one carrier of the multi-carrier signal, thereby generating a minimized residual signal for the at least one carrier; and

combining the minimized residual signals and the multicarrier signal.

2. (Previously Presented) A method according to claim 1 further comprising prior to the combining the minimized residual signals, filtering at least one minimized residual signal.

3. (Previously Presented) A method according to claim 1 further comprising delaying the multicarrier signal, wherein the delayed multicarrier signal is combined with the minimized residual signal.

4. (Previously Presented) A method according to claim 1, wherein the generating the residual signal includes clipping the multicarrier signal to a predetermined level to thereby generate the hard-clipped multicarrier signal.

5. (Previously Presented) A method according to claim 2, wherein the filtering comprises complex filtering.

6. (Previously Presented) A method according to claim 5, wherein the filtering comprises ₣ multiplying the residual signal by a projection matrix of a spanned signal space of the at least one carrier.

7. (Previously Presented) A method according to claim 5, wherein the filtering includes applying to the residual signal, for at least one carrier, a matrix function, a sampling function, a filtering function and an interpolation function.

8. (Previously Presented) An apparatus comprising:

a generating unit configured to generate a residual signal from a multicarrier signal, the residual signal representing a difference between the multicarrier signal and a hard-clipped multicarrier signal;

an applying unit configured to apply a least squares function to the residual signal for at least one carrier of the multi-carrier signal, thereby generating a minimized residual signal for the at least one carrier; and

a combining unit configured to combine the minimized residual signals and the multicarrier signal.

9. (Previously Presented) Apparatus according to claim 8, further comprising a filtering unit configured to filter each minimized residual signal prior to implementation of the combining.

10. (Previously Presented) Apparatus according to claim 9, further comprising a delaying unit configured to delay the multicarrier signal, wherein the delayed multicarrier signal is combined with the minimized residual signals.

11. (Previously Presented) Apparatus according to claim 9, wherein the generating unit includes a clipping unit configured to clip the multicarrier signal to a predetermined level to thereby generate the hard-clipped multicarrier signal.

12. (Previously Presented) Apparatus according to claim 10, wherein the filtering unit comprises a complex filter.

13. (Previously Presented) Apparatus according to claim 12, wherein the filtering unit comprises a multiplying unit configured to multiply the residual signal by a projection matrix of a spanned signal space of the at least one carrier.

14. (Previously Presented) Apparatus according to claim 13, wherein the filtering unit includes an applying unit configured to apply to the residual signal, for at least one carrier, a matrix function, a sampling function, a filtering function and an interpolation function.

15. (Previously Presented) A mobile communication system comprising:

a transmitter apparatus configured to reduce a peak-to-mean ratio of a multi-carrier signal;

a generating unit configured to generate a residual signal from a multicarrier signal, the residual signal representing a difference between the multicarrier signal and a hard-clipped multicarrier signal;

an applying unit configured to apply a least squares function to the residual signal for at least one carrier of the multi-carrier signal, thereby generating a minimized residual signal for the at least one carrier; and

a combining unit configured to combine the minimized residual signals and the multicarrier signal.

16. (Previously Presented) The mobile communication system according to claim 15, wherein said generating unit, said applying unit and said combining unit are implemented in a GSM EDGE mobile communication system.

17. (Previously Presented) An apparatus comprising:

generating means for generating a residual signal from a multicarrier signal, the residual signal representing a difference between the multicarrier signal and a hard-clipped multicarrier signal;

applying means for applying a least squares function to the residual signal for at least one carrier of the multi-carrier signal, thereby generating a minimized residual signal for the at least one carrier; and

combining means for combining the minimized residual signals and the multicarrier signal.

18. (Currently Amended) A mobile communication system comprising:

transmitting means for reducing a peak-to-mean ratio of a multicarrier signal;

generating means for generating a residual signal from ~~a~~ the multicarrier signal, the residual signal representing a difference between the multicarrier signal and a hard-clipped multicarrier signal;

applying means for applying a least squares function to the residual signal for at least one carrier of the multi-carrier signal, thereby generating a minimized residual signal for the at least one carrier; and

combining means for combining the minimized residual signals and the multicarrier signal.